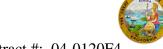
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022725

Address: 333 Burma Road **Date Inspected:** 18-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1530 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: Fred Von Hoff and William Sherv CWI Present: Yes No

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Delayed / Cancelled: Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 10E/11E side plate 'C2' (0mm to 2638mm) inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 continuing to perform CJP groove (splice) welding root pass on the splice butt joint. The welder was observed perform automatic welding in the 3G (vertical) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1. The joint being welded had a single V-groove but joint with backing bar. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using propane gas torch prior welding. During welding, ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. During the, root pass welding on the splice butt joint location mentioned above was completed and the welder has spent the rest of the day diverting the water from getting into the weld due to the rain today.

At OBG 9E/10E bottom plate 'D2' inside, QA randomly observed ABF/JV qualified welder Jorge Lopez perform CJP groove welding repair. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The second time repair excavation located at Y=3600mm and was having excavation profile of 150mm long x 32mm wide x 20mm deep was preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC William Sherwood was noted monitoring the

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

welder. Prior welding, ABF QC William Sherwood was also observed performing Magnetic Particle Testing (MT) on the boat shape repair excavation. At the end of the shift, cover pass welding on the repair was completed and QC has informed this QA that the welder will go outside the OBG tomorrow and perform back welding of the same repair from the outside due to burn through during welding.

At OBG 10E/11E side plate 'E1' (0mm to 1100mm) inside, QA randomly observed ABF/JV qualified welder Fred Kaddu perform root pass to fill pass welding on the Complete Joint Penetration (CJP) splice butt joint where the track mounted Bug-o FCAW welder nozzle holder has limited access. The welder was observed manually welding in the 3G (vertical) position utilizing a Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040B. The joint being welded has a single V-groove butt joint with steel backing bar. During welding, ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass SMAW welding was still continuing and should remain tomorrow.

At OBG 7E-PP53-E5-#1 & 3 lifting lug access hole to top deck plate outside – ABF welder Jason Collins was observed 1G SMAW welding root pass to cover pass on the infill plate to top deck plate butt joints. The welder was noted using 1/8" and 5/32" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1070. Prior welding, ABF QC Fred Von Hoff was observed inspecting the fit up of the butt joints. QA verified the fit up alignment of the two access holes which deemed acceptable to the contract requirements. During welding, ABF QC Fred Von Hoff was noted monitoring the welder's welding parameters. At the end of the shift, cover pass welding on the top side location of the two butt joints was completed and QC informed this QA that the welder is moving to lifting lug holes located at 7E-PP55-E3 #1 & 3.





WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

No significant conversation ocurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer